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动物分类学报

A REMARKABLE NEW SPECIES OF CERATINELLA EMERTON, 1882 (ARANEAE, LINYPHIIDAE, ERIGONINAE) FROM THE RUSSIAN FAR EAST

Yuri M. Marusik[1,2] , Valery A. Gnelitsa[2,3]
1. *Institute for Biological Problems of the North , Portovaya Str.* 18 , *Magadan* , 685000 *Russia* ; *E-mail* : *yurmar@mail. ru*
2. *Zoological Museum , University of Turku , FI-*20014 *Turku , Finland*
3. *Sumy State Makarenko Teacher's Training University* , 87 *Romenskaya Str. , Sumy* 40000 , *Ukraine* ; *E-mail* : *gnelitsa@mail. ru*

Abstract The new species Ceratinella kurenshchikovi sp. nov. is described on the basis of the holotype male from Khabarovsk Province. It has a modified carapace , a character unknown in other Ceratinella species. The male palp of the new species is most similar to that of C. brevis.

Key words Spider , cephalic outgrowth , scutum , Bolshekhekhtsyrski Reserve.

Introduction

Ceratinella is a relatively large , but poorly studied genus of erigonine spiders. It comprises of 28 recognized species and has a Holarctic distribution (Platnick , 2009). Only one species , C. sydneyensis Wunderlich , 1976 is known outside of the Holarctic region. This species is known only from the female and is either misplaced or has been introduced to Australia. Of the 28 species 11 are known only from females , and two other species are known only from males. Of the 11 species described from females , 7 are from the Nearctic and all of them were described by R. Chamberlin. The copulatory organs in this genus are rather homogeneous and the epigyne is only slightly variable. Only two Nearctic species: C. brunnea Emerton , 1882 and C. buna Chamberlin , 1949 have modified palps and epigynes. Males of these species have long retrolateral tibial apophyses and females lack an apical hood (socket) of epigyne. Some species are definitely misplaced (C. subulata Bösenberg & Strand , 1906 and C. fumifera Saito , 1939). Eight species of Ceratinella are known from Russia (Mikhailov , 1997). Only one of them , C. sibirica Strand , 1903 , described from Krasnoyarsk , is known only from the female.

While studying material from Khabarovsk Province we found one male with a remarkably modified cephalic region , but with the palp and abdomen typical for Ceratinella. The aim of this paper is to describe this new species. The holotype male will be deposited in the Zoological Museum of the Moscow State University (ZMMU).

The holotype was photographed using an Olympus Camedia C-5050 camera attached to an Olympus SZX12 stereomicroscope. The images were montaged using "Combine ZM" image stacking software. Photographs were taken in dishes with paraffin on the bottom. Holes were made in the bottom to keep specimens in the correct position. All measurements are given in millimetres.

Species description

Ceratinella kurenshchikovi sp. nov. (Figs. 1-10)

Material. Holotype ♂ (ZMMU) , Russia , Khabarovsk Prov. , environs of Khabarovsk , Bolshekhektsyrski Reserve , Klyuch Sosninsky Kordon (48°14′N , 134°47′E) , broad leafed forest , ca 400 m , fallen tree , 8. 06. 1994 (D. K. Kurenshchikov).

Etymology. The specific name is a patronym in honour of our friend and colleague Dmitri K. Kurenshchikov who collected the holotype.

Diagnosis. This species can be easily distinguished from other Ceratinella and even all other Erigoninae by the shape of the cephalic outgrowth (cf. Figs. 1-3 , 8-10). In terms of male palp structure , the new species is very similar to C. brevis (Wider , 1834) (the type species of Ceratinella) , but can be easily differentiated by the shape of the carapace and the large abdominal scutum covering the entire dorsal surface.

Description. Total length 1. 54. Carapace: 0. 7 long , 0. 66 wide , yellow-red to brown. Cephalic region modified , with T-shaped outgrowth bearing PME (Figs. 1-3 , 8-10). PME separated by approximately 4 times their diameters. Sternum 0. 43 long , 0. 42 wide , orange. Labium dark brown. Tibial spines absent or indistinct.

Table **1.** Leg joints length.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Mt Tr
I	0. 53	0. 19	0. 43	0. 36	0. 32	0. 47
II	0. 53	0. 18	0. 43	0. 37	0. 30	0. 50
III	0. 43	0. 18	0. 32	0. 31	0. 25	0. 46
IV	0. 59	0. 18	0. 50	0. 42	0. 29	0. 49

Entire abdomen covered by light brown scutum with 4 sigillae , the posterior pair being more distinct than the anterior pair (Figs. 2-3). Palp as in Figs. 4-7. Femur and patella unmodified; patella with small claw-like

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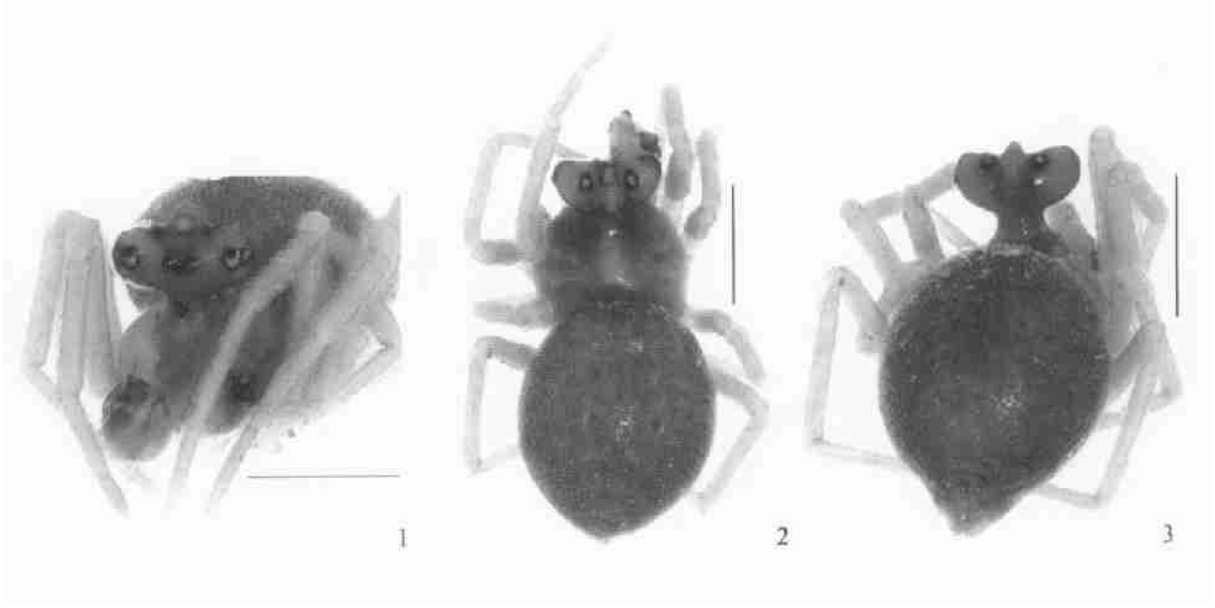

Figs. 1-3. General appearance of Ceratinella kurenshchikovi sp. nov. 1. Frontal. 2. Dorsal. 3. Cadual. Scale bars = 0.5 mm.

retrolateral apophysis and rectangular dorsal apophysis, cymbium with small prolateral lobe (Fig. 5), paracymbium massive, embolus proper thin, tail-piece of radix forming a sharp point.

Comment. Although no other Ceratinella species has a modified carapace and scutum covering the entire dorsal side of the abdomen, we placed the new species in this genus because of the conformation of the male palp, which is almost identical to C. brevis, the type species of the genus. The presence or absence of a cephalic outgrowth in Erigoninae cannot serve as a generic character, because in several genera there are some species in which males have a modified prosoma and other species that do not, i. e. Ceraticelus, Oedothorax, Perlongipalpus, Procerocymbium, Walckenaeria, etc.

According to Millidge (1977) Ceratinella belongs to the Pelecopsis group of genera. The most closely related genera are Ceratinopsis Emerton, 1882, Styloctetor Simon, 1884 and Ceraticelus Simon, 1884. The first two genera have males with an unmodified carapace, and only one Styloctetor species has an abdominal scutum.

Most of the Ceraticelus species with a modified carapace in males, have also developed dorsal and ventral abdominal scuta. At the same time Ceraticelus have a long tibial apophysis and females lack an anterior hood (socket).

Distribution. Type locality only. Because Bolshekhetsyrski Reserve lies on the border with China its occurrence there is very likely.

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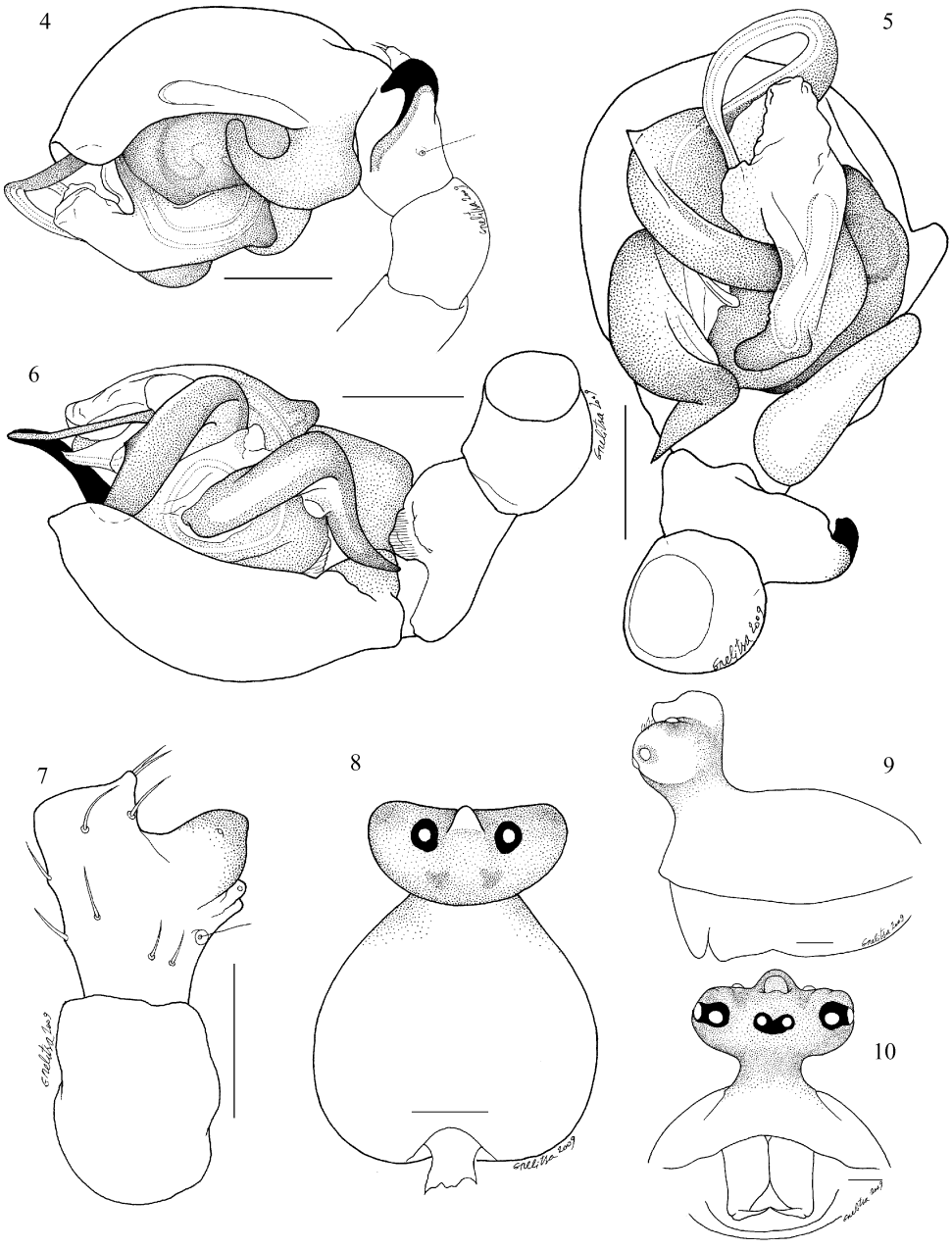

Figs. 4-10. Left male palp and prosoma of Ceratinella kurenshchikovi sp. nov. 4. Palp, retrolateral. 5. Palp, ventral. 6. Palp, prolateral. 7. Tibial apophysis, dorsal. 8. Prosoma, dorsal. 9. Prosoma, lateral. 10. Prosoma, frontal. Scale bars = 0.1 mm.

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